

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board

Paper No. 41

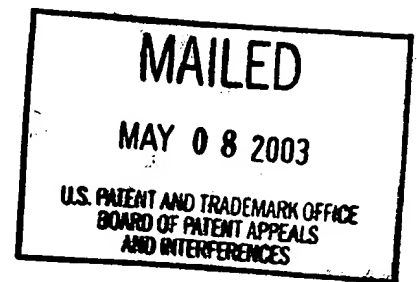
UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

Ex parte VOLKER SCHMIDT

Appeal No. 2001-1979  
Application 08/836,369

ON BRIEF



Before THOMAS, RUGGIERO, and BLANKENSHIP, Administrative Patent Judges.

THOMAS, Administrative Patent Judge.

DECISION ON APPEAL

Appellant has appealed to the Board from the examiner's final rejection of claims 1, 3 and 82.

Claim 1 is reproduced below:

1. Device for temperature measurement comprising:

a) a detector for receiving heat radiation emanating from a measurement spot on an object of measurement

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b) an optical system for imaging the heat radiation emanating from the measurement spot onto the detector

c) and a sighting arrangement having a laser aligned to illuminate a diffractive optical system to produce a diffraction pattern in the form of light intensity distribution for identifying and outlining the position and size of the measurement spot on the object of measurement by means of visible light.

The following reference is relied on by the examiner:

Hollander et al. (Hollander) 5,368,392 Nov. 29, 1994

Claims 1, 3 and 82 stand rejected under 35 U.S.C. § 103.

As evidence of obviousness, the examiner relies upon Hollander alone.<sup>1</sup>

Rather than repeat the positions of the appellant and the examiner, reference is made to the brief and the answer for the respective details thereof.

#### OPINION

We reverse.

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<sup>1</sup> In the paragraph bridging pages 2 and 3 of the answer, the examiner has withdrawn another rejection under 35 U.S.C. § 103 that was set forth in the final rejection.

The basic elements of independent claim 1 on appeal have been admitted by appellant to be a part of the prior art according to the discussion of substitute specification page 2, which indicates that it was known in the art for a contactless temperature measurement device to comprise a detector and an optical system as broadly recited in claim 1 on appeal. Furthermore, this prior art indicates that it was known to use a sighting arrangement for identifying and outlining the position and size of the measurement spot of the object of measurement by means of visible light. There is no dispute between the examiner and appellant that the applied prior art to Hollander also teaches or suggests to the artisan this subject matter.

The feature of independent claim 1 on appeal in dispute is the use of "a laser aligned to illuminate a diffractive optical system to produce a diffraction pattern in the form of light intensity distribution" for the purposes of identifying and outlining the position and size of the measurement spot on the object of measurement by means of visible light as recited in clause c) of claim 1 on appeal.

The examiner has stated at page 4, in the paragraph bridging pages 6 and 7 and at page 9 of the answer that Hollander does not teach this form of sighting arrangement. Appellant agrees and, from our study of this reference, there is no teaching or suggestion within Hollander of utilizing a diffractive optical system to produce a diffractive pattern forming light intensity distributions.

The examiner's reliance upon column 3, lines 45-48 and column 6, lines 50 and 51 of Hollander fails to convince us of the obviousness of this subject matter in dispute. These portions of Hollander merely indicate alternative choices to the artisan to utilize plural, individual lasers or a single laser with laser splitting devices to form a plurality of beams. Thus, there is not suggestion of utilizing the claimed diffractive optical system within Hollander's numerous embodiments.

Simply put, the examiner has failed to establish a prima facie case of obviousness on the basis of Hollander alone. There is no teaching or suggestion in Hollander alone of utilizing a diffractive optical system to produce the claimed diffraction

pattern. It is presumptive and certainly begs the question for the examiner to argue that it would have been obvious in effect to utilize any type of beam splitter arrangement known in the art to provide a plurality of beams in Hollander, notwithstanding the plurality of approaches taught among his seven embodiments.

There is no evidence before us, in the form of at least one additional prior art reference, to convince us that the artisan would have found it obvious to have utilized a diffractive optical system to produce the claimed diffraction pattern, even if we agree with the examiner's views in the answer that diffractive optical systems were known in the art. The question remains, why would the artisan have chosen to use a diffractive optical system instead of or with the seven embodiments in Hollander without additional evidence to persuade the artisan to do so.

Therefore, to sustain the examiner's rejection, we would need to resort to speculation or unfounded assumptions to supply the factual deficiencies in the record before us. This we decline to do. Note the guidance provided by In re Warner, 379 F.2d 1011, 1017, 154 USPQ 173, 178 (CCPA 1967), cert. denied,

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389 U.S. 1057 (1968), reh'g denied, 390 U.S. 1000 (1968). Here, simply put, more evidence is needed to convince us.


Our reviewing court has made it clear in In re Lee, 277 F.3d 1338, 61 USPQ2d 1430 (Fed. Cir. 2002), and In re Zurko, 111 F.3d 887, 42 USPQ2d 1476 (Fed. Cir. 1997), that rejections must be supported by substantial evidence in the administrative record and that where the record is lacking in evidence, this Board cannot and should not resort to unsupported speculation. As indicated in Lee, 277 F.3d at 1343-44, 61 USPQ2d at 1433-34, the examiner's finding of whether there is a teaching, motivation or suggestion to combine the teachings of the applied references must not be resolved based on "subjective belief and unknown authority," but must be "based on objective evidence of record."

Since we have concluded the examiner has not established a prima facie case of obviousness of independent claim 1 on appeal,

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the rejection of its dependent claims 3 and 82 must also be reversed. As such, the decision of the examiner rejecting the claims on appeal under 35 U.S.C. § 103 is reversed.

REVERSED

  
James D. Thomas  
Administrative Patent Judge

*Joseph F. Ruggiero*  
Joseph F. Ruggiero  
Administrative Patent Judge

Howard B. Blankenship  
Administrative Patent Judge

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